

REMARKS

Claims 8, 11, 17, 20, 22 and 25 are presently in the application. Claims 1-7, 9, 10, 12-16, 18, 19, 21, 23, 24 and 26 have been canceled.

The drawings have been objected to for failing to illustrate the "diaphragm or bellows seal" recited in claims 14-16. Claims 14-16 have been canceled. Accordingly, withdrawal of the objection is requested.

Claims 8-13 and 17-26 have been rejected under 35 USC 102(b) as anticipated by Majima et al (US 5,129,489). Reconsideration of the rejection is requested.

Claim 8 has been amended to include the language of claim 10, which has been canceled. Claim 8 is now directed to a valve for controlling fluids having a holder body including a receptacle containing a piezoelectric actuator unit and a hydraulic coupler module that has at least one positioning piston and at least one actuating piston that is operatively connected to the positioning piston via a hydraulic coupler and actuates a valve-closure member that cooperates with at least one valve seat and, in the closed position, prevents a flow of fluid from a valve chamber to a return conduit, a seal guiding the positioning piston in the receptacle, wherein the positioning piston comprises an annular collar and a positioning washer, and wherein the seal is disposed between the annular collar and the positioning washer.

Majima teaches a hydraulically operated displacement transmission mechanism for a shock absorber. As shown in FIG. 2, the shock absorber 41 comprises a cylinder 51 and a main piston 53 slidably fitted therein for movement in axial directions indicated by the arrows A, B. The interior space of the cylinder 51 is divided into first and second hydraulic pressure chambers

55, 57 by the main piston 53. The main piston 53 is coupled to one end of a piston rod 59, the other end of which is connected to a shaft 61. The cylinder 51 has a lower end (not shown) connected to the suspension arm 11 which supports the front left road wheel 1. The shaft 61 has an upper end (not shown) coupled to the motor vehicle body 21. The piston rod 59 and the shaft 61 have an axial hollow storage chamber 67 defined therein that houses a piezoelectric actuator or stack 67FL. A piston 69 is disposed in closely confronting relation to the lower end of the piezoelectric stack 67FL with a seat 67a interposed therebetween. The piston 69 is axially slidable in the storage chamber 67, and is normally urged to move in the direction indicated by the arrow A by means of a leaf spring 69a acting on the lower end of the piston 69.

The lower end of piston 69 includes a groove (unnumbered) for receiving an O-ring seal 69b (see, Fig. 6). The bottom surface of the piston rod 59 which defines the storage chamber 67 and the lower surface of the piston 69 jointly define a hydraulic pressure chamber 71. A sleeve 71a is disposed vertically in the bottom of the hydraulic pressure chamber 71. The sleeve 71a has a central hole 71b extending in the axial direction of the piston rod 59, and a plunger 73 in the form of a rod is slidably fitted in the hole 71b. The plunger 73 has a lower end extending through an O-ring 75 which is positioned beneath the lower end of the sleeve 71a. The O-ring 75 is closely held against the lower end of the sleeve 71a and the plunger 73 by a closure plate 76 that is mounted on a lower surface of the piston rod 59. The lower end of the plunger 73 also extends through the center of the closure plate 76. A spool valve 77 is slidably fitted in a hole 71c of a circular cross section defined in the piston rod 59. The hole 71c communicates coaxially with the hole 71b in the plunger 73, and is larger in diameter than the hole 71b. The spool valve 77 is

normally urged by a spring 79 in the hole 71c to move in the direction indicated by the arrow A. The spool valve 77 has an annular groove 77b defined in a lower outer peripheral surface thereof. The hole 71c extends through and across two horizontally aligned auxiliary passages 88a, 88b defined in the piston rod 59 and communicating with other auxiliary passages 88c, 88d defined in the piston rod 59 (see also FIG. 4). The auxiliary passage 88d communicates with the second hydraulic pressure chamber 57 through an orifice 88e. The first and second hydraulic pressure chambers 55, 57 are connected to each other through these auxiliary passages 88a, 88b, 88c, 88d.

The examiner has found that Majima et al teaches a valve for controlling fluids comprising a holder body (piston rod 59), a receptacle (storage chamber 67) containing a piezoelectric actuator unit (piezoelectric stack 67FL) and a hydraulic coupler module (piston 69, hydraulic pressure chamber 71, and sleeve 71a) that has at least one positioning piston (piston 69) and at least one actuating piston (sleeve 71a) that is operatively connected to the positioning piston via a hydraulic coupler (hydraulic pressure chamber 71) and actuates a valve-closure member (spool valve 77) that cooperates with at least one valve seat (hole 71c) and, in the closed position, prevents a flow of fluid from a valve chamber (hydraulic pressure chamber 55) to a return conduit (auxiliary passage 88c), a seal (O-ring seal 69b) guiding the positioning piston in the receptacle, wherein the positioning piston comprises an annular collar, which the examiner identifies as the upper half of piston 69, and a positioning washer, which the examiner identifies as the lower portion of piston 69.

Regarding the interpretation of claim language, MPEP 2111 teaches that:

During patent examination, the pending claims must be "given their broadest reasonable interpretation consistent with the specification." The Federal Circuit's

en banc decision in *Phillips v. AWH Corp.*, 415 F.3d 1303, 75 USPQ2d 1321 (Fed. Cir. 2005) expressly recognized that the USPTO employs the "broadest reasonable interpretation" standard:

The Patent and Trademark Office ("PTO") determines the scope of claims in patent applications not solely on the basis of the claim language, but upon giving claims their broadest reasonable construction "in light of the specification as it would be interpreted by one of ordinary skill in the art." *In re Am. Acad. of Sci. Tech. Ctr.*, 367 F.3d 1359, 1364[, 70 USPQ2d 1827] (Fed. Cir. 2004). Indeed, the rules of the PTO require that application claims must "conform to the invention as set forth in the remainder of the specification and the terms and phrases used in the claims must find clear support or antecedent basis in the description so that the meaning of the terms in the claims may be ascertainable by reference to the description." 37 CFR 1.75(d)(1).

415 F.3d at 1316, 75 USPQ2d at 1329. See also *In re Hyatt*, 211 F.3d 1367, 1372, 54 USPQ2d 1664, 1667 (Fed. Cir. 2000).

With regard to the embodiment illustrated in Fig. 4, applicants' specification describes a control piston 61 whose end oriented toward the actuator head 36 is provided with an annular collar 62 that serves to fix an O-ring 50, which seals the region of the receptacle 32 containing the actuator unit in relation to the region of the receptacle 32 containing the coupler module 34. The O-ring 50 is fixed by means of a positioning washer 63 that serves to adjust the volume of the hydraulic coupler 38 and rests against a tubular spring 47. The drawings show that the positioning washer 63 is, in fact, what it says it is, i.e., a washer.

The words of the claim must be given their plain meaning unless the plain meaning is inconsistent with the specification. *In re Zletz*, 893 F.2d 319, 321, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989) (discussed below); *Chef America, Inc. v. Lamb-Weston, Inc.*, 358 F.3d 1371, 1372, 69 USPQ2d 1857 (Fed. Cir. 2004). See, MPEP 2111.01. The plain meaning of the word

“washer” as used in the context of applicants’ specification is “3 a flat ring of metal, rubber, leather, or plastic with a hole in the middle. Washers are used with bolts or nuts, or to make joints tight, as in a water faucet.” The World Book Dictionary 2360 (1987).

Fig. 3 in Majima et al shows a groove formed in the lower portion of the piston 69. An O-ring is positioned or fixed within this groove. The examiner reads the words “positioning washer” on the lower portion of piston 69, but the lower portion of piston 69 is not a flat ring of material with a hole in the middle, i.e., it is not a “washer.” The examiner has clearly misinterpreted the words “positioning washer” in claim 8.

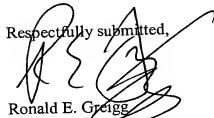
To support a rejection of a claim under 35 U.S.C. 102(b), it must be shown that each element of the claim is found, either expressly described or under principles of inherency, in a single prior art reference. See Kalman v. Kimberly-Clark Corp., 713 F.2d 760, 772, 218 USPQ 781, 789 (Fed. Cir. 1983), cert. denied, 465 U.S. 1026 (1984).

Majima does not teach a valve for controlling fluids of the type recited in claim 8 including a positioning piston having an annular collar and a positioning washer, and wherein a seal is disposed between the annular collar and the positioning washer. Accordingly, claim 8 and its dependent claims are not anticipated by the teachings of Majima.

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Entry of the amendment and allowance of the application are respectfully requested.

Respectfully submitted,



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